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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/049,891   | 07/08/2002  | Maria Raidel         | KCC 4814 (KC #15,978) | 2410             |
| 321  | 7590        | 05/04/2006           | EXAMINER              |                  |
| SENNIGER POWERS<br>ONE METROPOLITAN SQUARE<br>16TH FLOOR<br>ST LOUIS, MO 63102 |             |                      | HILL, LAURA C         |                  |
|  |             |                      | ART UNIT              | PAPER NUMBER     |
|  |             |                      | 3761                  |                  |

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/049,891

Applicant(s)

RAIDEL ET AL.

Examiner

Laura C. Hill

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 44-73, 82 and 83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-73 and 82-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 27 January 2006 have been fully considered but they are not persuasive.

In response to Applicant's argument that 'Lassen et al. therefore fail to disclose or suggest an absorbent body having at least one fold line extending at least in part laterally of the absorbent body as recited in amended claim 44' (see Remarks pages 10-11), the amended limitation of the 'fold line extending at least in part laterally of the absorbent body' as recited on lines 7-8 does not require the fold line extend entirely across the absorbent body or only parallel to the absorbent body transverse axis but only requires some component of the fold line extends *in part laterally* along the absorbent body. The flexure axis 24, 124 of Lassen extends along the longitudinal axis but also has a component that extends across the absorbent body in a direction parallel the transverse axis (see attached annotated Figure 2 and by Applicant's own admission page 11). Furthermore, the flexure axis 24 is 'positioned along the transverse X-X axis' (column 6, lines 22-25).

The above explanation is meant to clarify how the limitation 'fold line extending at least in part laterally of the absorbent body' was interpreted in response to the allegation that 'there is no basis for the Office to take the position that the longitudinally extending fold lines in the embodiment of Figure 4 extend in part laterally of the absorbent body' (see Remarks page 12).

In response to Applicant's argument that 'the flexure axis 24 of Lassen et al. extends longitudinal only' (see Remarks page 10), it is noted that the Examiner has not stated the flexure axis *only* extends longitudinally. In the previous Office action on page 3, the Examiner stated that the flexure axis extends longitudinally but also has a lateral component as discussed above.

It is also noted that Applicant asserts that 'the embodiments of Figs. 5, 6 and 7 of the present application each have fold line wherein each fold line extends both laterally and longitudinally' and thus Lassen that also has laterally and longitudinally-extending components meets the claim limitation and is capable of functioning in the same manner for fluid distribution.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

1. Claims 44-48, 54-55, 58, and 82-83 are rejected under 35 U.S.C. 102(b) as being anticipated by Lassen et al. (EP 0687453 A1; herein 'Lassen'). Regarding claims 44, 54, and 82-83 Lassen discloses absorbent core 18 of sanitary napkin 10, which absorbs body fluids and conforms to the body, having the tissue construction bi-folded to form two symmetrical square halves and a flexure axis/fold line 24 along longitudinal centerline Y-Y (col. 1, ll. 3-5, col. 6, ll. 13-22 and col. 10, ll. 2-7, figure 3). Lassen further discloses the longitudinal flexure axis/fold line 24 can be positioned transversely, i.e., along the X-X axis and off center from the longitudinal center line Y-Y, and thus

extending at least in part laterally of the absorbent body 18 and creating segments foldable relative to one another (col. 6, ll. 22-25).

Regarding claims 45-48 Lassen discloses absorbent core which includes a body-facing/inner surface 20 positioned adjacent the cover 12, a garment-facing/outer surface 22 positioned adjacent the baffle 14, a flexure axis 24/fold line with a depth less than unfolded absorbent article thickness that is formed in at least one of the surfaces 20,22, and a depth extending substantially through the entire thickness (fig. 1 and col. 3, ll. 55-col. 4, line 1).

Regarding claim 55 Lassen discloses flexure axis 24/fold line forms first and second members 26 and 28/segments, which have a polygonal shape (fig. 1).

Regarding claim 58 Lassen discloses cover layer 12 adapted for contact with wearer's skin, inner layer 20 that is liquid permeable since it is a part of absorbent body 18, baffle 14/backing layer in opposed relation with inner layer 20 and the absorbent body 18 disposed between cover layer 12 and baffle 14/ backing layer (fig. 1).

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 49-53 and 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lassen et al. (EP 0687453 A1; herein 'Lassen') as applied to claims 44, and further in view of Reising et al. (US 4,988,344; herein 'Reising'). Regarding claim 49 Lassen *does not expressly disclose* the absorbent body 18 is multi-layered. **Reising** discloses multiple layered absorbent core 42 for use in sanitary napkins (col. 1,

II. 6-8, col. 2, II. 64-col. 3, line 3) and liquid handling/outer layer 50 and storage/inner layer 52 (col. 4, II. 54-57) for acquiring, distributing, and storing subsequent loadings of liquids (col. 3, lines 1-3). One would be motivated to modify the absorbent core of Lassen with the multi-layered core of Reising to enhance acquiring, distributing, and storing subsequent loadings of liquids since both references disclose absorbent cores for handling bodily waste. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the absorbent core, thus providing an absorbent core constructed of at least two layers.

Regarding claim 50 Lassen *does not expressly disclose* the relative dimensions of a multi-layered absorbent body. **Reising** discloses storage/inner layer 52 will be have a smaller surface area (and thus a smaller length and/or width) than liquid handling/outer layer 50 (col. 17, II. 40-43) so that the storage/inner layer 52 drains liquid handling/outer layer 50 of much of its acquired liquid load (col. 18, lines 2-4). One would be motivated to modify the absorbent body of Lassen with the multi-layered relative size dimension core of Reising to enhance acquiring, distributing, and storing subsequent loadings of liquids since both references disclose absorbent cores for handling bodily waste. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the absorbent core, thus providing an absorbent core having layers with relative size dimensions.

Regarding claims 51-53 Reising further discloses the inner layer 52 has a surface area of about 25% of the surface area of outer layer 50 (col. 17, II. 30-49).

Regarding claim 56 Lassen discloses inner and outer layers of flexure axis/fold line 24 with multiple slits/scores 36 that extend through a percentage of the inner surface 20 (col. 8, ll. 26-27 and fig. 1).

Regarding claim 57 Lassen discloses inner surface 20 nearer the wearer's body than outer surface 22 and discloses inner surface 20 having a polygon shape (fig. 1).

3. Claims 59-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lassen et al. (EP 0687453 A1; herein 'Lassen') as applied to claim 58, and further in view of Murakami (US 5,387,210; herein 'Murakami'). Regarding claims 59-60 Lassen et al. *does not expressly* disclose side wings with an adhesion system. **Murakami** discloses it is well known to include wings extending outward from opposite side edges of a longitudinally central area of said core on sanitary napkins (col. 1, ll. 14-19). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the sanitary napkin of Lassen, thus providing side wings that adhere to the garment to prevent leakage.

Regarding claim 61 Lassen discloses a means for attaching the sanitary napkin 10 to an undergarment-using adhesive placed on the garment side/outer surface of baffle 14/backing layer (col. 13, ll. 38-40).

Regarding claim 62 Lassen discloses a transfer layer 23 positioned between the cover 12 and absorbent core 18 for rapidly transporting body fluids into the absorbent core and to reduce the occurrence of rewet and a surfactant/distributing layer sprayed on cover 12 to enhance liquid penetration to the absorbent core 18 (col. 4, ll. 2-6 and 47-49).

Regarding claim 63 Lassen discloses an absorbent article as discussed above with respect to claim 59 (col. 2, line 2).

Regarding claim 64 Lassen discloses an absorbent core 18 that can be constructed of creped cellulose wadding (col. 5, ll. 48-49). Meyer et al. reference (US 4,798,603), incorporated by reference into the Lassen et al. reference, includes a top sheet 14 made of synthetic polymers such as polypropylene (col. 4, ll. 32-35). Lassen et al. does not expressly disclose the absorbent body comprises coform. It would be obvious to one of ordinary skill in the art that one of the layers of the absorbent body could comprise Coform, which is a blend of cellulose and polypropylene, since Lassen et al. discloses using synthetic polymers such as cellulose and polypropylene.

Regarding claim 65 Lassen discloses the absorbent core can be constructed from super absorbent polymers (col. 5, line 50).

Regarding claims 66-67 Lassen discloses a cover 12 that encases a central and edge portion of sanitary napkin 10 or alternatively the cover 12 can extend beyond the absorbent core 18 and be peripherally joined by an adhesive or any other joining method known in the art (col. 4, ll. 16-27 and fig. 1).

Regarding claims 68-69 Lassen *does not expressly disclose* the bonds are hot-melt adhesive or welding. One would be motivated to modify the bonding to include hot-melt adhesive or welding since Lassen discloses the use of any adhesive or joining methods, including the aforementioned attachment methods. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify



the central and edge portions of the absorbent article, thus providing hot-melt adhesive or welding bonded portions.

4. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lassen et al. (EP 0687453 A1; herein 'Lassen'), and further in view of Reising et al. (US 4,988,344; herein 'Reising') as applied to claim 49. Lassen further discloses a transfer layer 23/flow layer positioned between the cover 12 and absorbent core 18 for rapidly transporting body fluids into the absorbent core and to reduce the occurrence of rewet and a surfactant sprayed on cover 12 to enhance liquid penetration to the absorbent core 18 as discussed in claim 62 (col. 4, ll. 2-6 and 47-49).

5. Claims 71-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lassen et al. (EP 0687453 A1; herein 'Lassen'), and further in view of Reising et al. (US 4,988,344; herein 'Reising') as applied to claim 49, and further in view of Uitenbroek et al. (US 5,897,541; herein 'Uitenbroek'). Lassen/Reising *does not expressly disclose* the layers of the absorbent body being differentiated visually via a different color.

**Uitenbroek** discloses laminates for use in absorbent garments such as feminine care products (col. 1, ll. 8-11), the laminate 10 having second layer 14 with a different coloration than first layer 12 for visual recognition of each layer (col. 1, ll. 35-43, figures 1-3). One would be motivated to modify the absorbent layers of Lassen/Reising with colored layers of Uitenbroek for visually differentiation since both references disclose multi-layered absorbent layers for use in personal care articles. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify

the laminate layers, thus providing visually differentiated multi-colored layered absorbent core.

6. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lassen et al. (EP 0687453 A1; herein 'Lassen') in view of Murakami (US 5,387,210; herein 'Murakami'), and further in view of Reising et al. (US 4,988,344; herein 'Reising'). Meyer et al. ('603), incorporated by reference into Lassen, discloses wrap sheet 30/cover layer that is configured to have an effective average pore size which is smaller than the effective pore size of the transport layer and functions to reduce and restrict flow back of liquids against the wearer's skin (col. 6, ll. 11-14). Lassen/Murakami *do not expressly disclose* porosity decreasing from the cover to the outermost layer of the absorbent body. **Reising** discloses a relative capillary difference between the zones 56, 58 surrounding absorbent layers 48, 50, 52 to establish a capillary force gradient (col. 9, ll. 27-44). One would be motivated to modify the porosity of the layers to establish a capillary force gradient for improved liquid handling since the references disclose absorbent cores for handling bodily waste. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the layers, thus providing a capillary force gradient.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

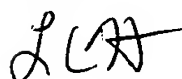
Art Unit: 3761

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura C. Hill  
Examiner  
Art Unit 3761

LCH



TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

